

What is claimed is:

1. A sheet stacking/aligning apparatus comprising:
stack means for stacking sheets thereon; and
sheet rear end aligning means for pushing and
aligning the rear end of a sheet conveyed onto said
stack means,

wherein said sheet rear end aligning means
includes sheet holding means for holding the sheets
stacked on said stack means.

2. A sheet stacking/aligning apparatus according
to Claim 1,

wherein said sheet holding means is an elastic
member supported rotatably by said sheet rear end
aligning means.

3. A sheet stacking/aligning apparatus comprising:
stack means for stacking sheets thereon; and
sheet rear end aligning means for pushing and
aligning the rear end of a sheet conveyed onto said
stack means,

wherein said sheet rear end aligning means
includes:

sheet holding means for holding the sheets stacked
on said stack means; and

sheet scraping means for contacting with the sheet
prior to said sheet holding means to scrape off the

sheet.

4. A sheet stacking/aligning apparatus according to Claim 3,

wherein said sheet holding means and said sheet scraping means are elastic members supported rotatably by said sheet rear end aligning means, and

wherein said sheet holding means share an axis with said sheet scraping means in phase shift.

5. A sheet handling apparatus comprising:

a sheet handling unit for handling a sheet; and a sheet stacking/aligning apparatus according to any of Claims 1 to 4 for stacking/aligning the handled sheet.

6. An image forming apparatus comprising:

an image forming unit for forming an image on a sheet; and

a sheet handling apparatus according to Claim 5 for handling the image-formed sheet.

7. A sheet handling apparatus comprising:

intermediate handling means for temporarily stacking a sheet conveyed from sheet conveyance means to handle the sheet;

stack means for stacking the sheets handled;

sheet rear end aligning means capable of moving selectively to a support position at which it supports the lower face of the sheet bundle handled by said intermediate handling means, or an escape position at which it escapes from the lower face of said sheet bundle to drop said sheet bundle onto said stack means;

control means for changing the position of said sheet rear end aligning means between the support position and the escape position; and

sheet holding means for holding the rear end portions of the sheets stacked on said stack means,

wherein said control means makes controls so that it may cooperate to perform the sheet rear end aligning operation by said sheet rear end aligning means for moving from the escape position to the support position to align the rear end of the sheet bundle dropped on said stack means and the sheet holding operation by said sheet holding means.

8. A sheet handling apparatus according to Claim 7,

wherein said control means makes controls to change the pushing force by said sheet holding means in accordance with the change in the rate of the sheet rear end aligning operation by said sheet rear end aligning means.

9. A sheet handling apparatus according to Claim 7,
wherein said control means makes controls to
generate a pushing force for said sheet holding
means to push said sheet toward said sheet rear end
aligning means, after said sheet rear end aligning
means began to push the rear end of said sheet.

10. A sheet handling apparatus according to Claim 9,
wherein said control means makes controls:
to start the sheet holding operation by said
sheet holding means at an earlier timing than that
of the end of the sheet rear end aligning operation
by said sheet rear end aligning means; and

to end the sheet holding operation by said
sheet holding means at a timing simultaneous with or
later than that of the end of the sheet rear end
aligning operation by said sheet rear end aligning
means.

11. A sheet handling apparatus according to Claim 7,
further comprising a drive unit for driving said
sheet rear end aligning means and said sheet holding
means with common drive means.

12. A sheet handling apparatus according to Claim
11,

wherein said drive unit includes:

a rocking shaft for transmitting the rotation of said drive means to support said sheet rear end aligning means in a rocking manner;

a rotary shaft for supporting said sheet holding means rotatably; and

drive transmission means for transmitting the rotation of said rocking shaft to said rotary shaft, and

whereby said sheet rear end aligning means is rocked according to the rotation of a cam portion provided by said rotary shaft.

13. An image forming apparatus comprising:

a sheet handling apparatus according to any of Claim 7 to 9; and

an image forming unit for forming an image on a sheet to be conveyed to said sheet handling apparatus.

14. An image forming apparatus comprising:

an image forming unit for forming an image on a sheet;

intermediate handling means for temporarily stacking the image-formed sheet to handle the sheet;

stack means for stacking the sheets handled;

sheet rear end aligning means capable of moving selectively to a support position at which it

supports the lower face of the sheet bundle handled by said intermediate handling means, or an escape position at which it escapes from the lower face of said sheet bundle to drop said sheet bundle onto said stack means;

control means for changing the position of said sheet rear end aligning means between the support position and the escape position; and

sheet holding means for holding the rear end portions of the sheets stacked on said stack means, wherein said control means makes controls so that it may cooperate to perform the sheet rear end aligning operation by said sheet rear end aligning means for moving from the escape position to the support position to align the rear end of the sheet bundle dropped on said stack means and the sheet holding operation by said sheet holding means.

15. An image forming apparatus according to Claim 14,

wherein said control means makes controls to change the pushing force by said sheet holding means in accordance with the change in the rate of the sheet rear end aligning operation by said sheet rear end aligning means.

16. An image forming apparatus according to Claim

14,

wherein said control means makes controls to generate a pushing force for said sheet holding means to push said sheet toward said sheet rear end aligning means, after said sheet rear end aligning means begins to push the rear end of said sheet.

17. An image forming apparatus according to Claim 14,

wherein said control means makes controls:

to start the sheet holding operation by said sheet holding means at an earlier timing than that of the end of the sheet rear end aligning operation by said sheet rear end aligning means; and

to end the sheet holding operation by said sheet holding means at a timing simultaneous with or later than that of the end of the sheet rear end aligning operation by said sheet rear end aligning means.

18. An image forming apparatus according to Claim 14, further comprising a drive unit for driving said sheet rear end aligning means and said sheet holding means with common drive means.

19. An image forming apparatus according to Claim 18,

wherein said drive unit includes:

a rocking shaft for transmitting the rotation of said drive means to support said sheet rear end aligning means in a rocking manner;

a rotary shaft for supporting said sheet holding means rotatably; and

drive transmission means for transmitting the rotation of said rocking shaft to said rotary shaft, and

whereby said sheet rear end aligning means is rocked according to the rotation of a cam portion provided by said rotary shaft.